



IMPACT OF CURRICULUM TRANSACTION STRATEGIES ON TEST ANXIETY OF STUDENTS

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ABSTRACT

Test anxiety is “a special kind of nervousness that arises from the total test situation.” Everyone should feel somewhat anxious before they begin to take a test. Anxiety becomes a problem when it begins to interfere with the students' ability to think logically or remember facts. Test anxiety is a kind of state anxiety which is related to the impending danger from the environment of the academic institutions including teachers, certain subjects like Mathematics, English, Economics etc. This study investigates the impact of various curriculum transaction strategies on test anxiety of eleventh grade students studying in HPBSE and CBSE schools. The findings of the study revealed that the various transaction strategies used by the teachers of both the schools did not have much effect in reducing the anxiety level of students. The present study suggested that the teachers should make use of study skills, discussion method, inculcate good study habits and provide counseling to the students so that they may deal with anxiety in a better way.

KEY WORDS: Curriculum, Curriculum Transaction Strategies, Test Anxiety.

INTRODUCTION

Education aims at making children capable of becoming responsible, productive and useful members of society. Knowledge, skills and attitudes are built through learning experiences and opportunities created for learners in school. It is in the classroom that learner can analyze and evaluate their experiences, learn to doubt, to question, to investigate and to think independently. In the present globalized world, we are witnessing increasing competitive environment into which schools are being drawn and the aspirations of parents place a tremendous stress and anxiety on children, including the very young to the determinant of their personal growth and development, and thus hamper the joy of learning.

Curriculum touches all aspects of the life of the students, environment which should be educationally congenial to them, ways and manners in which their interests can be handled and warmed up, the procedures and approaches which cause effective learning among them, the social efficiency of the individuals and how they fit in with the community around them. It is intimately related with the individual as a member of the society. It embodies the educational philosophy and the values which it aims to achieve, the purpose it wants to realize and the specific goals that it wants to achieve.

Curriculum transaction incorporates decisions about the contents and effective planning for providing learning experiences to its learners on the basis of content, implementation of the organized planning and evaluation of the implementations by the implementer and the experts in the relevant field. The process of curriculum transaction is the touchstone of success of any curriculum programme. It consists of the totality of experiences that a pupil receives through the manifold activities that go on in the school, in the classroom, library and play ground and in the numerous contacts between the teachers and the students. It is characterized by variety and flexibility and is tailored to the needs of the students at different age levels. It gives the students an increasing awareness of the environment around them so that they may fit in more efficiently in the milieu of community life. A curriculum could fail to achieve its expectations if the process of transaction is faulty and ineffective.

The word 'anxiety' is derived from the Latin word 'Anxieta' meaning 'distress state of throttle, choke cause pain'. Test anxiety is “a special kind of nervousness that arises from the total test situation.” Everyone should feel somewhat anxious before they begin to take a test. Anxiety becomes a problem when it begins to interfere with the students' ability to think logically or remember facts. The medical definition of anxiety according to Merriam-Webster is an abnormal and overwhelming sense of apprehension and fear often marked by psychological signs (as sweating, tension and increased pulse), by doubt concerning the reality and nature of the threat and by self-doubt about one's capacity to cope with it.

Test/examination anxiety shows itself not just as a psychological feeling of nervousness but can also manifest as bodily symptoms. The term “exam fever” is not an exaggeration. It is not uncommon for students, overwhelmed with stress, to experience headaches, indigestion, fever and block outs before and during exams. Other physical symptoms include excessive sweating, stomachache, nausea, shortness of breath, palpitations and dry mouth. Poor concentration, “blanking out,” confusion and poor organization are also warning signs of test anxiety.

Test anxiety has four components - worry, emotionality, task generated interferences and study skill deficits. Worry is any cognitive expression of one's concern

about own performance. Worry refers to those thoughts, images and emotions of negative nature in which mental attempts are made to avoid anticipated potential threats. Thus, worry refers to negative self-talk that often distract the mind from focusing on solutions to the problems at hand. Emotionality refers to physiological symptoms such as sweating, increased heartbeat and raised blood pressure, muscle tension etc. It is observable, behavioural and physiological component of emotion and is a measure of person's emotional reactivity to a stimulus. Task generated interference refers to unproductive behaviours that are related to task at hand and prevent an individual from successfully performing on that task. The last component of test anxiety is study skill deficits which include the problems related with methods of studying or learning a particular subject. Inappropriate study or learning methods adopted by students may lead to generation of anxiety and poor academic performance. Many students experience the first three components of test anxiety as a result of study skills deficits.

Various factors like teachers' attitude, teaching methods, method of evaluation, overburdened curriculum, lack of proper guidance, partial attitude of teachers affect the test anxiety among the students.

Khidtta (1993) attempted to study the test anxiety in boys and girls at high school level in Himachal Pradesh and found out that: (1) high school boys did not exhibit a significant change in their level of test anxiety from class VI to X; and (2) high school girls did not exhibit a significant change in their level of test anxiety from class VI to class X. Sach (1995) studied “Math anxiety among elementary education students in a mathematics methods course”. The results showed that about 1/3 students had high anxiety, 1/3 had moderate anxiety and 1/3 had little or no anxiety. Parental and peer attitude towards the usefulness of mathematics had no influence on anxiety. Most of those with high anxiety had low confidence in them and rarely took part in class discussion. In co-operative group work, high anxiety students' were invariably the followers rather than leaders. Miller (1999) studied “The effects of anxiety reduction and study skills techniques on achievement and anxiety level of students' enrolled in a basic algebra course at a small private college”. Results of the study indicated a significant reduction in anxiety and increase in achievement for the treatment group. Additional analysis indicated a significant difference in anxiety between one of the instructor's treatment and control group and a significant difference in anxiety between the two instructor's treatment groups. No significant difference in gender was indicated for anxiety or achievement. Ajwani and Sharma (2004) made an attempt to study the test anxiety in relation to academic achievement and found out that high academic achievers showed greater anxiety in testing situations as compared to low academic achievers. Dwivedi and Gunthey (2005) conducted a study to observe the influence of medium of instruction on level of academic anxiety among school students. Results indicated that the medium of instruction has direct influence on academic anxiety. Academic anxiety level of English medium students was significantly greater than the students of Hindi medium. Singh (2011) investigated study habits in relation to anxiety and achievement. The main findings of the study were: (1) high, average and low anxiety groups showed significant difference in the means of study habits scores. Average anxiety group possessed significantly better study habits than the high anxiety group as well as low anxiety group; (2) there was no significant difference in the study habits of high and low anxiety groups; (3) there was significant difference in the study habits of first grade and second grade achievers; (4) second and third grade achievers did not differ significantly in their study habits; (5) students' with average anxiety level showed significantly better study habits than

the students' with high and very low anxiety level; and (6) students' with average anxiety showed better academic performance than the students' with low and high anxiety level. Neelam and Attri (2013) attempted to find out the academic anxiety and academic achievement of secondary school students. The findings of the study revealed that there exist significant differences in academic anxiety and academic achievement of male and female secondary school students. Girls were found to be more academically anxious and had better academic achievement than boys.

From the perusal of the above studies it is evident that most of the studies have been conducted on test anxiety and its impact on academic achievement. Sach studied anxiety in relation to math's subject and Dwivedi and Gunthey studied the impact of medium of instruction on test anxiety. There is hardly any research which studies the impact of various curriculum transaction strategies on test anxiety and then makes a comparison between two school boards. Hence, it was thought worthwhile to undertake a study on the impact of curriculum transaction strategies on students' test anxiety at higher secondary stage and further make a comparison between two school boards.

OBJECTIVE OF THE STUDY

The present study aims to study and compare the impact of curriculum transaction strategies on the test anxiety of students studying in grade xi in schools affiliated to Himachal Pradesh Board of School Education (HPBSE) and Central Board of Secondary Education (CBSE).

HYPOTHESES OF THE STUDY

The following were the hypothesis for the study:

- (1) The level of test anxiety of eleventh grade students studying economics in schools affiliated to HPBSE will not differ significantly from the level of test anxiety of eleventh grade students studying economics in schools affiliated to CBSE before the use of various curriculum transaction strategies by their teachers.
- (2) The test anxiety level of HPBSE school students will reduce significantly as a result of the curriculum transaction strategies used by the teachers for teaching economics
- (3) The test anxiety level of CBSE school students towards the subject of economics will reduce significantly as a result of the curriculum transaction strategies used by the teachers.
- (4) The level of test anxiety of eleventh grade students studying economics in schools affiliated to HPBSE will differ significantly from the level of test anxiety of eleventh grade students studying economics in schools affiliated to CBSE as a result of the use of various curriculum transaction strategies by their teachers.

DELIMITATION OF THE STUDY

- (1) The study was delimited to the schools affiliated to HPBSE and CBSE and situated in urban areas of Shimla city.
- (2) The study was confined to the impact of curriculum transaction strategies in economics on students' test anxiety.

METHOD

The method used in the present study was Randomized Groups Pre-Test-Post-Test Design. This design was used to measure the impact of curriculum transaction strategies on test anxiety. For this, a pre test assessing this variable was administered to the two groups of HPBSE and CBSE students at the beginning of the academic session. Then throughout the session the two groups were taught by the usage of combination of curriculum transaction strategies by their respective teachers. At the end of the session, in order to study the impact of transaction strategies on students' test anxiety the tool selected for the measurement of test anxiety was re-administered to both the groups of students.

SAMPLING

For data collection multi stage sampling was used in the following manner: in the first stage the schools and teachers were selected. For these, two separate lists of all the schools affiliated to HPBSE (only government schools) and CBSE in Shimla Urban was prepared. There are a total of eleven higher secondary schools affiliated to HPBSE and thirteen higher secondary schools affiliated to CBSE in Shimla urban. For data collection four HPBSE schools and five CBSE schools were selected randomly through draw of lots. Thus nine schools were selected in the final sample.

From the sampled schools, 400 students were selected randomly by making use of random numbers table. The final data was collected in the academic session of 2015. The final list of the selected higher secondary schools and students is presented in table: 1.1

Table 1.1

List of Selected Higher Secondary Schools with Number of Students

Serial No	HPBSE Schools	No. of Students	CBSE School	No. of Students
1.	GSSS Portmore	61	Loreto Convent Tara Hall	25
2.	GSSS Lakkar Bazaar	53	St. Thomas School	32
3.	GSSS Kusumpti	49	Dayanand Public School	42
4.	GSSS Boileaugang	37	Chapslee School	53
			DAV School, New Shimla	48
Total	4	200	5	200

Tool Used for Data Collection

For measuring the test anxiety of students, Test Anxiety Inventory by Spielberger, Gonzalez, Tylor, Algaze and Anton (1978) translated and adapted by Anup Sud was used.

Data were analysed by using the 't' ratio.

Analysis and Discussions

The major objective of the research was to study the impact of curriculum transaction strategies on test anxiety of students studying in plus one class in schools affiliated to HPBSE and CBSE. To achieve this objective the data were subjected to t-test. The results are given in table no. 1.2, 1.3, 1.4 and 1.5.

1.1 Comparison of Pre-Test Means of Test-Anxiety Scores of Students Studying in Schools Affiliated to HPBSE and CBSE

In order to test the significance of difference in the pre-test means of test – anxiety scores of students studying in schools affiliated to HPBSE and CBSE before the use of curriculum transaction strategies by the teachers, the t-value was calculated. The result is given in table no 1.2 as under:

Table 1.2

Means of Test Anxiety Scores, MD, SD, SED and t-Value

Name of Board	N	Means of test Anxiety Pre-test Scores	Mean Difference	SD	SED	t-Value
HPBSE	200	39.14	1.31	10.20	0.998	1.31 NS
CBSE	200	40.45		9.77		

NS: Not Significant

It is evident from the table no 1.2 that the calculated value of 't' comparing the means of pre-test scores of students studying in schools affiliated to HPBSE and CBSE for 398 degree of freedom, came out to be 1.31, which is not significant even at the 0.05 level of significance.

Therefore the hypothesis that, “ the level of test anxiety of XI grade students studying economics in schools affiliated to HPBSE will not differ significantly from the level of test-anxiety of XI grade students studying economics in schools affiliated to CBSE before the use of curriculum transaction strategies by the teachers” was accepted.

It may be said that before the administration of curriculum transaction strategies the test anxiety level of students studying in school affiliated to HPBSE and CBSE was almost equal (39.14 and 40.45 respectively).

1.2 Impact of Curriculum Transaction Strategies on the Test Anxiety of Students Studying in HPBSE Schools

In order to compare the difference in the means of test-anxiety scores between pre-test to post-test of students studying in HPBSE schools as a result of the use of curriculum transaction strategies for teaching economics, the t-value was calculated. The result is given in table no. 1.3 below:

Table 1.3

Means of Test Anxiety Scores, MD, SED and t-Value

HPBSE Board	N	Means of Test Anxiety Scores	Mean Difference	SED	t-Value
Pre-Test	200	39.14	5.84	1.107	5.28*
Post-Test	200	44.99			

* 0.01 Level of Significance

The table no 1.3 indicates that the calculated value of 't' for comparing the means of pre-test and post-test scores of students studying in schools affiliated to HPBSE for degree of freedom 398, came out to be 5.28, which is significant at

the 0.01 level of significance. The mean of post-test anxiety scores (44.99) was significantly higher than the mean of pre-test scores (39.14).

Therefore the hypothesis that, “the test anxiety level of HPBSE school students will reduce significantly as a result of the use of curriculum transaction strategies used by the teachers for teaching economics” was not accepted.

It may be inferred that the various curriculum transaction strategies used by the HPBSE school teachers did not help in reducing the test anxiety of students.

1.4 Impact of Curriculum Transaction Strategies on the Test Anxiety of Students Studying in Schools Affiliated to CBSE

In order to compare the difference in the means of test-anxiety scores between pre-test and post-test of students studying in CBSE schools after curriculum transaction in economics, the t-value was calculated. The result is given in table no 1.4:

Table 1.4
Means of Test Anxiety Scores, MD, SED and T-Value

CBSE Board	N	Means of Test Anxiety Scores	Mean Difference	SED	t-Value
Pre-Test	200	40.45	1.95	1.011	1.92NS
Post-Test	200	42.40			

NS: Not Significant

It is evident from the table no 1.4 that the calculated value of 't' for comparing means of pre-test and post-test test anxiety scores of students studying in schools affiliated to CBSE, for 398 degree of freedom, came out to be 1.92 which is not significant even at the 0.05 level of significance (1.97).

Therefore the hypothesis that, “the test anxiety of CBSE school students towards the subject of economics will reduce significantly as a result of the usage of curriculum transaction strategies by the teachers” was accepted.

It may be interpreted that various curriculum transaction strategies used by the teachers helped in reducing the test anxiety of the students towards the subject.

1.5 Comparison of the Difference between the Test Anxiety Scores of Students Studying in Schools Affiliated to HPBSE and CBSE after Curriculum Transaction in Economics

In order to test the significance of difference in the means of post-test test anxiety scores of students studying in schools affiliated to HPBSE and CBSE after the usage of curriculum transaction strategies in economics by the teachers, the t-value was calculated. The result is given in table no 1.5 below:

Table 1.5
Means of Test Anxiety Scores, MD, SD, SED and t-Value

Name of Board	N	Means of Test Anxiety Post-Test Scores	Mean Difference	SD	SED	t-Value
HPBSE	200	44.99	2.59	11.88	1.119	2.315**
CBSE	200	42.40		10.45		

** : 0.05 Level of Significance

The table no 4.31 indicates that the calculated value of 't' for comparing the means of test anxiety scores of students studying in schools affiliated to HPBSE and CBSE after the usage of curriculum transaction strategies in economics, for 398 degree of freedom, came out to be 2.315, which is significant at the 0.05 level of significance.

Therefore the hypothesis that, “the level of test anxiety of XI grade students studying in schools affiliated to HPBSE will differ significantly from the level of test anxiety of XI grade students studying in schools affiliated to CBSE after the use of curriculum transaction strategies in economics by the teachers” was accepted.

Students studying in schools affiliated to HPBSE have significantly higher mean of test anxiety score (44.99) than their counterparts studying in schools affiliated to CBSE. Thus, it may be interpreted that curriculum transaction strategies used by the teachers were ineffective in reducing the test anxiety among students studying in schools affiliated to HPBSE than their counterparts studying in schools affiliated to CBSE.

Findings of the Study

- No significant difference was found in the level of test anxiety of HPBSE and CBSE school students before the transaction of the curriculum in the subject of economics.
- The various curriculum transaction strategies used by the teachers of HPBSE schools did not help in reducing the test anxiety of the students in the subject of economics.

- The various curriculum transaction strategies used by the teachers of CBSE schools helped in reducing the test anxiety of the students in the subject of economics.
- The students studying in HPBSE schools were comparatively high on anxiety after curriculum transaction in the subject of economics by their teachers as compared to their counterparts studying in CBSE schools.
- The impact of curriculum transaction strategies on reducing the test anxiety was higher among the CBSE school students than their counterparts studying in HPBSE schools.

Conclusions and Suggestions

The present study revealed that the various curriculum transaction strategies used by the teachers of HPBSE schools did not help the students in reducing their test anxiety. Stress in moderate amounts is necessary if one wants to succeed. It serves as a motivation, driving us towards the target. But when stress exceeds its optimal level, it creates a sense of disorganization and interferes with the healthy functioning of the mind. There are many reasons which may cause stress and anxiety to the students namely: cut off marks are shooting through the roof and competitiveness in all academic branches is increasing day by day, the pressure of getting admissions to the best of colleges, hopes and aspirations of parents, future employment prospects are all stressors for the students. A decline in academic performance is the most obvious outcome of test anxiety. In the present study it was found out that the teaching strategies being used by the teachers in the schools are not helping the students in reducing their test anxiety specially in the case of HPBSE schools. The students studying in CBSE schools are comparatively less prone to anxiety. It may be due to variety of reasons namely: pressure of getting good marks for getting admissions to good colleges, peer pressure, fear of failure, lack of preparation, over burden of studies, teachers of government schools being burdened by administrative work and election duties. Thus the teachers of these schools are left with little time to teach and have to rush through the syllabus to complete it.

Therefore, there are certain strategies which teachers especially of HPBSE may use to help reduce the test anxiety of students, namely: by providing life skill training the teachers should encourage the students to develop good habits and to take out time for interests and hobbies. Besides the more vulnerable students should be given guidance and the importance of healthy life style and exercises should be advocated. The teachers should also help the students to make proper time table for studying in which time is equally divided between studies and recreation. This will not only provide a break from the studies but will also help in developing proper study habits in the students. During the time of examination the students tend to confine themselves in their study rooms which may lead to an increase in their anxiety levels. The teachers should therefore advocate to students the importance of healthy communication among family members and friends. Talking to family and friends will help students in reducing their anxiety and will also make them feel more fresh and healthy. The teachers can also organize group discussions in the class on various topics. This will not only help in clarifying the doubts of the students but will also help them in preparing for the exams. The teachers can thus guide the students to help reduce their test anxiety by adopting the above mentioned strategies.

REFERENCES

- Ajwani, J. C. & Sharma, R. A. (2004). Test Anxiety in Relation to Academic Achievement. Indian Journal of Psychometry and Education, 35 (2),p. 123-125.
- Dwivedi, N. and Gunthey, R. (2005). Influence of Medium of Instruction on Level of Academic Anxiety among School Students. Edutracks: A Monthly Scanner of Trends in Education, 7 (2),p. 31-35.
- Kanchan, B. (2014). Study of Academic Anxiety, Achievement Motivation and Academic Achievement Motivation in Relation to Non Verbal Intelligence and Academic Achievement among Senior Secondary School Students, available at Shodhganga www:http://hdl.handle.net/10603/14781, assessed 17 July 2016.
- Khidta, R. P. (1993). A Study of Test Anxiety in Boy and Girl High School Students of Himachal Pradesh. (Unpublished M.Ed. Dissertation). Himachal Pradesh University, Shimla.
- Koul, L. (1998). Methodology of Educational Research. New Delhi: Vikas Publishing House.
- Neelam and Attri, A.K. (2013). Academic Anxiety and Achievement of Secondary School Students. International Journal of Behavioral Social and Movement Sciences, Vol. 02- Issue1, p. 27.
- Mahmood, N. and Rana, R. A. (2010). The Relationship between Test Anxiety and Academic Achievement. Bulletin of Education and Research, 32 (2),p. 63-74.
- Miller, P.M. (1999). The Effects of Anxiety Reduction and Study Skills Techniques on Achievement and Anxiety Level of Students Enrolled in a Basic Algebra Course at a Small Private College/, available at www.researchgate.net/researcher/25089998_Patricia_Bederman_Miller, assessed 20 October 2016.
- Parikh, S. (2012). “Testing Times”. Chandigarh: The Tribune.
- Singh, K. S. (2011). Study Habits in Relation to Anxiety and Achievement. Indian Journal of Psychometry and Education, 42 (1),p. 14-15.
- Sud, A., & Sujata. (2006). Academic Performance in Relation to Self-Handicapping, Test Anxiety and Study Habits of High School Children. Nati. Aca. Psy., 51 (4),p. 304-309.
- Trivedi, R. M. (1995). Anxiety Level and Academic Achievement of Undergraduate Students. Experiments in Education, XXIII (3), p.47-51.